Subject Index

Volume 26, 1993

Page numbers followed by (Abs) denote abstracts from the Nineteenth International Congress on Electrocardiology.

Activation maps
calculations with multipolar expansion (Abs), 167
and recovery times (Abs), 171
Aging
and sex differences in QT interval (Abs), 174
Alcoholism
late potentials in (Abs), 171
Amiodarone
T wave alternans associated with, 155
Amyloid polyneuropathy, familial
body surface maps in, 301
Angina pectoris
and silent ischemia on admission ECG, 131
Angioplasty, coronary
body surface mapping in, 43
Anisotropic propagation
in computer heart models, 245, 263
Aortic coarctation repair
body surface maps after, 25
Arrhythmias
in atrial septal defect, 225
automated interpretation of, 53
Arteriovenous fistulas
and heart remodeling studies with ECG (Abs), 166
Artifacts
in spectral analysis of RR interval from Holter recordings, 231
Atrial fibrillation
diagnosis with artificial neural networks (Abs), 167
susceptibility in glycemic states, 147
Atrial pacing
in single-vessel disease diagnosis (Abs), 171
Atrial septal defect
electrophysiological abnormalities in, 225
Atrioventricular junction
impulses affecting sinus node (Abs), 168
reentrant tachycardia and orthrodromic AV reentry in Wolff-Parkinson-White syndrome, 83
Autonomic blockade
affecting digoxin-induced ECG changes, 219

Biopsy, myocardial
correlation with ECG findings in infarction, 9
Body surface maps
after aortic coarctation repair, 25
in anterior infarction, 177
during coronary angioplasty, 43
correlation with ejection fraction in infarction, 17
in exercise, compared to exercise 12-lead ECG (Abs), 168
in familial amyloid polyneuropathy, 301
in identification of radiofrequency catheter ablation sites (Abs), 165
inverse calculations with multipolar expansion (Abs), 167
and number of independent signals in individuals, 107
in pericarditis, 291
QRST values in inferior infarction with left bundle branch block, 187
for reperfusion assessment in infarctions, 279
Bundle branch block
left, with inferior infarction, QRST values in, 187
right, $QRSv_1$ morphology in (Abs), 167
simulation in computer heart model, 263

Calcium
slow channel responses in hypoxia, 69
Cardiomyopathy, hypertrophic
high-resolution ECG abnormalities in (Abs), 175
risk of ventricular tachycardia in (Abs), 169
Cardioverter defibrillator, implantable
intraatrial conduction delay associated with, 341
loop ECG monitoring of, 235

Case reports
giant R waves in hyperacute myocardial infarction, 77
global T wave inversion in pulmonary embolism, 91, *(Letters)* 347
Holter artifact in RR interval spectrum, 231
intraatrial conduction delay with implantable cardioverter defibrillator, 341
loop ECG monitoring of implantable cardioverter defibrillator, 235
T wave alternans associated with amiodarone, 155
triple ventricular parasystole, 159
two types of reentrant tachycardias in Wolff-Parkinson-White syndrome, 83
Catecholamines
and automatic activity during hypoxia, 69
global T wave inversion from, 91, *(Letters)* 347
Chinese population
derived vectorcardiograms in, 97
Circumflex coronary artery occlusion
ECG changes in (Abs), 165
Coarctation of aorta repair
body surface maps after, 25
Computer-assisted techniques
analysis of digoxin-induced ST and T changes affected by autonomic blockade, 219
in arrhythmia diagnosis, 53
for derived vectorcardiograms in Chinese population, 97
and improved exercise test accuracy, 207
neural networks for atrial fibrillation diagnosis (Abs), 167
and proposed policy for reporting on neural network research, 241
QT interval dispersion measurements, 321
in single-vessel disease diagnosis (Abs), 171
Computer heart models
conduction block simulation in, 263
normal activation simulation in, 245
ventricular fibrillation induced in (Abs), 169
Conduction block
simulation in computer heart model, 263
Conduction system
dysfunction in atrial septal defect, 225
intraatrial delay with implantable cardioverter defibrillator, 341
Coronary arteries
angioplasty of, body surface mapping in, 43
reperfusion of
assessment with body surface mapping, 279
early accelerated idioventricular rhythm in (Abs), 175
QTc interval and left ventricular systolic function after, 333
transient occlusion of circumflex artery, ECG changes in (Abs), 165
Coronary artery disease
diagnosis of single-vessel disease (Abs), 171
improved exercise test accuracy in, 207
infarction in. *See also* Myocardial infarction
and R wave changes in exercise tests, 197
and silent ischemia on admission ECG, 131
Correlation coefficient in body surface maps
in anterior infarction, 177
in reperfusion assessment, 279

Defibrillator, implantable cardioverter
intraatrial conduction delay associated with, 341
loop ECG monitoring of, 235
Digoxin-induced ECG changes
autonomic blockade affecting, 219
Discriminant function analysis
in improvement of exercise test accuracy, 207
Dobutamine stress echocardiography
in myocardial ischemia detection (Abs), 169
Doxorubicin
cardiotoxicity assessment (Abs), 173

Echocardiography
in assessment of doxorubicin cardiotoxicity (Abs), 173
dobutamine stress test for myocardial ischemia (Abs), 169
of left ventricular systolic dysfunction in infarction, 333
Ejection fraction
correlation with body surface maps in infarction, 17
Electrical current paths
in acute pericarditis, 291
Embolism, pulmonary
global T wave inversion in, 91, *(Letters)* 347
Exercise tests
autonomic blockade affecting digoxin-induced ECG changes in, 219
body surface maps compared to 12-lead ECGs in (Abs), 168
improved accuracy of, 207
postinfarction, heart rate variability in (Abs), 173
and QTc changes after infarction, 125
and R wave changes in supraventricular extrasystoles, 197
in single-vessel disease (Abs), 171
treadmill test compared to dobutamine stress echocardiography (Abs), 169
Extrasystoles, supraventricular
exercise-induced, R-wave changes in, 197

Familial amyloid polyneuropathy
body surface maps in, 301
Fibrillation
atrial
diagnosis with artificial neural networks (Abs), 167
susceptibility in glycemic states, 147
ventricular, in three-dimensional cardiac computer model (Abs), 169
Fibrinolytic therapy
and early accelerated idioventricular rhythm in reperfusion (Abs), 175
QTc interval and left ventricular systolic function after, 333

and reperfusion assessment with body surface mapping, 279

Global ejection fraction
and postinfarction regression of ECG signs, 1
Glucose levels
and atrial susceptibility to fibrillation, 147

Heart rate variability
and artifacts in RR interval spectrum from Holter recordings, 231
and maximal postinfarction exercise capacity (Abs), 173
High-resolution studies
magnetocardiography in prediction of postinfarction ventricular tachycardia, 117
postinfarction signal-averaged ECGs, wavelet analysis of, 311
value of ECG abnormalities in hypertrophic cardiomyopathy (Abs), 175
Histamine
global T wave inversion from, 91, *(Letters)* 347
Holter monitoring
and artifacts in RR interval spectrum, 231
Hyperglycemia
as factor in atrial fibrillation, 147
Hypertension
predictive value of initial ECG in (Abs), 170
specific potential and left ventricular performance in (Abs), 170
Hypertrophic cardiomyopathy
high-resolution ECG abnormalities in (Abs), 175
risk of ventricular tachycardia in (Abs), 169
Hypertrophy
left ventricular
and predictive value of ECG in hypertension (Abs), 170
and specific potential in hypertension (Abs), 170
right ventricular, in chronic obstructive lung disease, ultrafast CT, and ECG findings in (Abs), 166
Hypoglycemia
as factor in atrial fibrillation, 147
Hypoxia
automatic activity in, 69

Idioventricular rhythm
early accelerated, as coronary reperfusion marker (Abs), 175
Infarction. *See* Myocardial infarction
Inverse models
based on specific anatomy (Abs), 173
Ischemia
exercise treadmill test compared to dobutamine stress echocardiography in (Abs), 169
and global T wave inversion in pulmonary embolism, 91, *(Letters)* 347
residual, and postexercise QTc changes after infarction, 125
silent, on admission ECG, 131

Late potentials
in chronic alcoholism (Abs), 171
and sustained monomorphic ventricular tachycardia (Abs), 174
Letters to the Editor, 239, 347
Loop ECG monitors
for implantable cardioverter defibrillators, 235

Magnetic resonance imaging
and specific inverse models derived from thoracic scans (Abs), 173
Magnetocardiography, high-resolution
in prediction of postinfarction ventricular tachycardia, 117
Methyl xanthines
and automatic activity during hypoxia, 69
Minnesota Q/QS codes
compared to clinical ECG readings, 137
Multilead ECGs. *See* Body surface maps
Myocardial infarction
acute anterior, body surface mapping in, 177
giant R waves in hyperacute phase of, 77
inferior, with left bundle branch block, QRST values in, 187
lateral, new ECG sign in (Abs), 172
map parameters and ejection fraction in, 17
Minnesota Q/QS codes compared to clinical ECG readings in, 137
minor QRS changes in, 9
postinfarction heart rate variability and exercise capacity (Abs), 173
prediction of ventricular tachycardia in
high-resolution ECGs in, 311
high-resolution magnetocardiography in, 117
and QTc changes after exercise, 125
QTc interval and left ventricular systolic dysfunction in, 333
regression of ECG signs in, 1
and silent ischemia on admission ECG, 131
in transient occlusion of circumflex artery (Abs), 165

Neural network research, *(Letters)* 239
in atrial fibrillation diagnosis (Abs), 167
proposed policy for reporting on, 241

Pacemaker activity
hypoxia affecting, 69
Pacing, atrial
in single-vessel disease diagnosis (Abs), 171
Parasystole
triple ventricular, 159

Pericarditis, acute
electrical current paths in, 291
Polyneuropathy, familial amyloid
body surface maps in, 301
Pulmonary embolism
global T wave inversion in, 91, *(Letters)* 347

Q wave
regression after myocardial infarction, 1
Q/QS patterns
in Minnesota code compared to clinical ECG readings, 137
QRS complex
loss related to ST-segment elevation
in anterior infarction, 177
in reperfusion assessment, 279
minor changes in infarction, 9
QRS score
postinfarction changes in, 1
QRST values
in inferior infarction with left bundle branch block, 187
QRSv_1 morphology
in right bundle branch block (Abs), 167
QT interval
automated dispersion measurements from hard-copy ECGs, 321
prolongation of
in acute pulmonary embolism, 91, *(Letters)* 347
and T wave alternans associated with amiodarone, 155
and self-correlation problem (Abs), 172
sex differences in (Abs), 174
QTc interval
and left ventricular systolic dysfunction in infarction, 333
postexercise changes after infarction, 125

R waves
changes in exercise-induced supraventricular extrasystoles, 197
giant, in hyperacute myocardial infarction, 77
Radiofrequency ablation sites
identification with body surface maps (Abs), 165
Reentrant tachycardias
two types in Wolff-Parkinson-White syndrome, 83
Refractory period
atrial, and susceptibility to fibrillation in glycemic states, 147
Reperfusion of coronary arteries
assessment with body surface mapping, 279
early accelerated idioventricular rhythm in (Abs), 175
QTc interval and left ventricular systolic function after, 333
RR interval
artifacts in spectral analysis of Holter recording, 231

Septal defect
atrial, electrophysiological abnormalities in, 225
Specific potential
and left ventricular performance in hypertension (Abs), 170
Spectral analysis
of RR interval, artifacts in, 231
ST-segment
in acute pericarditis, 291
body surface maps of shift during coronary angioplasty, 43
elevation related to QRS loss
in anterior infarction, 177
in reperfusion assessment, 279
recovery slope in exercise testing, 207
ST-T segment
digoxin-induced changes in, autonomic blockade affecting, 219
Systolic function
ventricular, and QTc interval in acute infarction, 333

T wave
alternation of, amiodarone-associated, 155
global inversion in pulmonary embolism, 91, *(Letters)* 347
Tachycardia
reentrant, two types in Wolff-Parkinson-White syndrome, 83
ventricular
postinfarction prediction with high-resolution ECGs, 311
prediction with high-resolution magnetocardiography after infarction, 117
risk assessment in hypertrophic cardiomyopathy (Abs), 169
sustained monomorphic, late potentials in (Abs), 174
Thallium-201 scintigraphy
in postinfarction exercise testing, 125
Thrombolytic therapy
and early accelerated idioventricular rhythm in reperfusion (Abs), 175
QTc interval and left ventricular systolic function after, 333
and reperfusion assessment with body surface mapping, 279
Time-scale technique
in wavelet analysis of high-resolution ECGs, 311
Triple ventricular parasystole
complex ECG pattern in, 159
Twelve-lead ECGs
in acute pericarditis, 291
and derived vectorcardiograms in Chinese population, 97
exercise tests compared to exercise body surface mapping (Abs), 168
QRST values in inferior infarction with left bundle branch block, 187

Vectorcardiography
in assessment of doxorubicin cardiotoxicity (Abs), 173
data for Chinese population, 97
QRST values in inferior infarction with left bundle branch block, 187
Ventricles
left
hypertrophy of. *See* Hypertrophy, left ventricular
systolic dysfunction and QTc interval in acute infarction, 333
right, hypertrophy in chronic obstructive lung disease, ultrafast CT, and ECG findings in (Abs), 166
Ventricular arrhythmias
fibrillation in three-dimensional cardiac computer model (Abs), 169
tachycardia. *See* Tachycardia, ventricular
triple parasystole, 159
Ventriculography
quantitative, correlated with Minnesota Q/QS codes, 137

Wavelet analysis
of postinfarction high-resolution ECGs, 311
Wolff-Parkinson-White syndrome
two types of reentrant tachycardias in, 83

Author Index

Volume 26, 1993

Abe, Toshio, 225
Abreu, P., 165
Adachi, Masayoshi, 17, 187
Aguilera, M., 172
Allensworth, Daniel C., 131
Araujo, V. P., 170
Azevedo, J., 170

Babatas, G., 171
Bachárová, L., 170
Balogh, I., 168
Bandini, F., 173
Baranowski, R., 175
Bardají, A., 155
Barić, Ljubo, 1
Batista, J., 165
Batsford, William P., 341
Bayés, de Luna, A., 171
Bell, Anthony J., 177, 279, 291
Berenson, G. S., 174
Bergovec, Mijo, 1
Bhullar, Harsangeet K., 321
Biblo, L. A., 165
Birtić, Krešimir, 1
Bordalo-Sá, A. L., 175
Borovsky, S., 171
Borras, X., 171
Bridges, S. Louis, 131
Briggs, Catherine M., 177, 279
Budgett, D. M., 173
Busà, G., 168

Calhoun, H. P., 172, 174
Cantinho, Guilhermina, 125
Carlson, M. D., 165
Carmona, J., 170
Carvalho, Madalena, 125
Cavallaro, L., 168
Charif, M., 171
Chen, Chung-Yin, 97
Chiang, Benjamin N., 97
Chiodi, L., 173
Choinowska, L., 175
Coglitore, A., 168
Coppolino, P., 173
Correia, M. J., 175

da Costa, Brás B., 125
d'Alche, P., 171
Dassen, Willem R. M., 241
Davignon, A., 174
de Bono, David P., 321
de Lacerda, A. Pais, 125
de Pádua, Fernando, 125, 169
Derome, Denis, 43
Desseigne, P., 311
Devine, Brian, 167, 239
DiCarlo, Lorenzo A., 53
Diogo, A. N., 175
Dionisio, Isabel, 125
Doi, Tetsuya, 69
Dominguez, P., 172
Dutoy, Jean-Luc, 43

Edenbrandt, Lars, 239
Erglis, A., 171

Fazi, A., 173
Feldman, Charles L., 231
Fiuza, M., 169
Florian, A., 173
Fothergill, John C., 321
Franceschi, Dinko, 1
Froelicher, Victor F., 207
Froning, Jeffrey, 207
Fujii, Hideki, 9
Furuta, Tatsuji, 187

Garcia-Alves, Mário, 125
Gauthier, V., 171
Gehring, Jürgen, 137
Goddard, William P., 321
Gonçalves, L., 166
Gremigni, C., 173
Grimnes, M. J. F., 173
Guadagno, I., 173
Gualtieri, S., 173
Guardia, J., 171
Guindo, J., 171
Gulrajani, Ramesh M., 245, 263

Hamel, Denis, 43
Hamer, Mark E., 235
Harumi, K., 169
Hasegawa, Junichi, 69
Hayashi, Hiroshi, 17, 187
Heinbuch, Sabine, 137
Hichami, A., 171
Hirai, Makoto, 17, 187
Hiraoka, M., 174
Hollowell, John S., 131
Hongo, Minoru, 301

Iacono, A., 173
Iarussi, D., 173
Ichihara, Yoshio, 17, 187

Inomata, Fumitake, 166
Irace, L., 173

Jenkins, Janice M., 53
Jennings, Robyn, 231
Jogestrand, Tomas, 219
Jurečková, K., 170

Kalnins, U., 171
Kane, Greg, 239
Kano, Yoshio, 225
Katila, Toivo, 117
Kawai, Sachio, 9
Kellerová, E., 170
Kemle, Kathy A., 131
Kepski, R., 175
Khayat, A., 171
Kilpatrick, David, 177, 279, 291
Kinoshita, Osamu, 301
Kinoshita, Toshihiko, 9
Kneppo, P., 167
Kocheril, Abraham G., 341
Kochumian, Minas, 207
Koenig, Wolfgang, 137
Kondo, Kazumasa, 17
Kotake, Hiroshi, 69
Kozlowski, W., 169
Kozmann, Gy., 168
Kurpesa, M., 169
Kužmová, J., 167

Leiniö, Matti, 117
Liebman, Jerome, 25, 165
Lin, Dongping, 53
Longo, A., 175
Lopes, M. G., 169
Lorange, Michel, 245, 263
Lui, Charles Y., 91, 347
Luzza, Francesco, 159

Macfarlane, Peter W., 97, 167, 239
Macieira-Coelho, Eduardo, 125
Madias, John E., 77
Mäkijärvi, Markku, 117
Malecka, L., 175
Manabe, Ichiro, 69
Marques, J., 170
Mashiba, Hiroto, 69
Matsumoto, Tatsuhiko, 69
Medeiros, Claudio Meirelles, 83
Melotová, J., 170
Michaelides, Andreas P., 197
Michalak, E., 175
Mihatov, Šime, 1
Monroe, D. M., 173
Montonen, Juha, 117
Moorman, J. Randall, 131
Morel M., 171
Morlet, D., 311
Motomiya, T., 174
Moulopoulos, Spyridon D., 147
Moussa, Issam, 207
Možina, Hugon, 333
Mulleneers, Rob G. A., 241
Musial, W. J., 169

Nadeau, Réginald, 43, 263
Nasmith, James, 43
Nichols, Pam, 177
Nieminen, Markku S., 117
Nishiyama, Atsushi, 187
Noč, Marko, 333
Nusynowitz, Martin L., 131

Okada, Ryozo, 9, 167
Okazaki, O., 169
Oreto, Giuseppe, 159, 168

Pacheco, F., 166
Page, Richard L., 235
Paraskevas, Panagiotis G., 197
Pedro, P., 169
Pereirinha, A., 169
Peyrin, F., 311
Piotrowska, J., 175
Pons, G., 171
Préda, István, 168, 263
Prineas, R., 174
Providência, L. H., 166
Prpić, Hrvoje, 1
Pryor, David B., 131
Puras, A., 172

Ratti, G., 173
Rautaharju, P. M., 172, 174
Real, T., 165
Reis, C., 175
Ribeiro, C., 175
Ribeiro, Jorge P., 83
Richart, C., 155
Rode, Primož, 333
Rodriguez, Michael, 207
Romano, A., 173
Ross, A., 171
Rubel, P., 311
Rudy, Yoram, 25
Ružyłło, W., 175

Saito, Hidehiko, 17
Saito, Makoto, 187
Sakurada, H., 174
Saltzberg, R., 165
Santas, L., 170
Santos, C., 166
Saporito, Francesco, 159
Satullo, Gaetano, 159, 168
Savard, Pierre, 43
Seabra-Gomes, R., 165
Sedláková, K., 170
Sekiguchi, Morie, 301
Sergi, G., 168
Shenasa, Mohammad, 43
Shiga, Yukio, 187
Shimizu, Seiji, 187
Sideris, Dimitris A., 147
Siltanen, Pentti, 117
Silva, D., 175
Siquier, J., 172
Skouros, Charalambos G., 197
Sole Cabrera, R., 172
Spodick, David H., 347
Stagg, Stephen W., 131
Štajer, Dušan, 333
Sundqvist, Kerstin, 219
Suzuki, Akira, 17, 187

Takatsu, Fumimaro, 9, 17, 187
Takeda, Masashi, 301
Takeuchi, Eiji, 225
Talmon, Jan L., 241
Tanaka, Minoru, 225
Tedesco, M. A., 173
Teh, Bin Sing, 291
Tejima, T., 174
Thomas, Cecil W., 25
Toivonen, Lauri, 117
Touboul, P., 311
Toutouzas, Pavlos K., 197
Trzos, S., 169
Tsiamis, Eleftherios G., 197
Tsuda, Makoto, 187
Tuna, J. L., 175
Tyšler, M., 167

Uijen, G. J. H., 107

van Oosterom, A., 107
Vardas, Panos E., 147
Vemmos, Kostas, 147
Vergassola, R., 173
Vidal, F., 155
Viñolas, X., 171
Visconcelas, N., 170
Vukosavić, Duro, 1
Vyssoulis, Gregory P., 197
Walczak, F., 175
Walder, Lon H., 347
Waldo, A. L., 165
Walker, Stephen J., 291
Walsh, Jan, 291
Watanabe, Masashi, 69
Watarai, Masato, 187
Wei, D., 169
Wharton, J. Marcus, 235
Wong, S., 172, 174
Yang, Ten-Fang, 97, 167
Zago, Alcides J., 83
Zhou, S. H., 172, 174
Žigman, Miroslav, 1
Zimerman, Leandro I., 83